Nam, Ed [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP From:

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A2653F1DDD59470688BA557DD84D9690-NAM, ED]

Sent: 4/18/2017 1:53:20 PM

Michael Compher (compher.michael@epa.gov) [compher.michael@epa.gov] To:

CC: Kathryn Siegel (siegel.kathryn@epa.gov) [siegel.kathryn@epa.gov]; Eileen Furey (furey.eileen@epa.gov)

[furey.eileen@epa.gov]

RE: URGENT ACTION - Invalidation of Ozone data in AQS due to QC issues Subject:

Michael,

You might want to let Jesse know that through his actions, he has already successfully elevated this specific issue as well as the more general issue. Not only is the Scientific Integrity Office aware of his concerns and conducting an investigation, all of the Regional QA staff are aware as well as, very likely, many of their management, OAQPS management up to the Director Level, as well as Region 5 up to the Director and Deputy RA level. I'm not sure who else he wants to elevate this to? Does he want to present at one of Bob's generals? Until the investigation is complete, Region 5 ARD will abide by our National Program Manager's direction on the issue in order to maintain national consistency.

Let's talk. -Ed

----Original Message----

From: McGrath, Jesse

Sent: Tuesday, April 18, 2017 8:35 AM

To: Compher, Michael <compher.michael@epa.gov>
Cc: Siegel, Kathryn <siegel.kathryn@epa.gov>; Nam, Ed <nam.ed@epa.gov>

Subject: RE: URGENT ACTION - Invalidation of Ozone data in AQS due to QC issues

That the general concept is under review by another party doesn't change that it's inappropriate to do in a specific instance, and my notice to the Scientific Integrity Office focused on larger issues than just the QC checks. At hand now is that designations across the country will be undermined, including areas that are almost certainly actually violate the ozone standards. This will undermine our goal of protecting human health, and prevent designations for years. The effects of incorrectly designating will not be remedied if this is allowed to continue.

Scrubbing the ends of a data set is a reviled practice in the sciences, and that OAQPS is doing it here to simply make data look "better" rather than explicitly saying they want to influence designations doesn't make it OK - just conceited. I'm ethically, and likely legally, compelled to elevate this to a level that will act on it; it will simply be more effective, and cooperative, if management clearly supports me.

Thank you, Jesse

----Original Message----

From: Compher, Michael

Sent: Monday, April 17, 2017 4:44 PM
To: McGrath, Jesse <mcgrath.jesse@epa.gov>

Cc: Siegel, Kathryn <siegel.kathryn@epa.gov>; Nam, Ed <nam.ed@epa.gov>

Subject: RE: URGENT ACTION - Invalidation of Ozone data in AQS due to QC issues

Jesse,

I have been made aware that the Agency's Scientific Integrity Office is reviewing the issue that you have raised in the past of invalidating ambient data when biweekly QC checks are exceeding the limits in the validation templates. I shared your continued concern about this topic with Ed Nam. Due to the current ongoing Scientific Integrity Office's review, he and I decided that this does not need to again be elevated.

Michael Compher

Chief, Air Monitoring and Analysis Section Region 5 Air and Radiation Division U.S. Environmental

Protection Agency Phone: 312-886-5745

----Original Message----

From: McGrath, Jesse

Sent: Thursday, April 13, 2017 2:01 PM

To: Compher, Michael <compher.michael@epa.gov> Cc: Siegel, Kathryn <siegel.kathryn@epa.gov>

Subject: RE: URGENT ACTION - Invalidation of Ozone data in AQS due to QC issues

Again, the specific actions OAQPS is asking for are illegal because they are a form of falsification, and contradict the clear wording of the CFR and guidance; the guidance they cited to the IG was misrepresented to the point of being deliberately deceitful. We pointed this out somewhat softly in writing and in calls. Also, both Regions 9 and 8 warned them clearly this contradicted the clear wording of the CFR, and that they would run into legal trouble.

We can have defensible data easily and legally by simply doing what the CFR and guidance say, review the data around the points in question, and I'm glad that we appear to be taking that approach in the region. However, the violating sites outside of Region 5 that will be unclassifiable after this action have no damning QA issues that justify OAQPS' approach, in fact they seem minor, and instead the state agencies should review them with their more complete information.

I'd like either Ed or Bob to send a memo to Joe Elkins, a senior manager in QA, notifying him that this is scientifically inexcusable and contradicts the CFR and guidance. Regions 9 and possibly 8 might support that. I can explain the scientific principles as well as I'm able, as well as provide the citations, and explain how the single citation they are using is being misrepresented.

This is a symptom of a much larger problem in the air monitoring program with level of knowledge and integrity; too many people don't understand fundamental concepts and are willing to cherry-pick and distort the guidance for support, rather than read it as a whole to learn and understand the concepts. That same mentality has led to the catastrophic failures of monitoring programs across the country, including the Cook County weighing lab, and if allowed to persist will undermine EPA's reputation as a trustworthy source of data.

Thank you, Jesse

----Original Message-----From: Compher, Michael

Sent: Thursday, April 13, 2017 12:06 PM

To: Hamilton, Ścott <hamilton.scott@epa.gov>; McGrath, Jesse <mcgrath.jesse@epa.gov>; Qazzaz, Bilal

<qazzaz.bila1@epa.gov>

Cc: Siegel, Kathryn <siegel.kathryn@epa.gov>

Subject: FW: URGENT ACTION - Invalidation of Ozone data in AQS due to QC issues

Importance: High

Scott, Bilal, and Chad,

This clear direction came from OAQPS earlier today for all the Regions to begin implementing. Please review the attachments, but hold off on any external communication to our States. We will meet early next week to discuss roll-out to our States, how we will distribute work/responsibilities, and communications with them (1:1 calls, initial call with all States, some other way or combination of ways). I will also engage APB so they are aware and talk with Doug about how to best keep them in the loop.

Bilal - Be aware that this will affect data certifications, which the states are assembling right now for the May 1 submittal deadline.

Jesse - Lets also use some of the time to discuss your spot check assessments (for all but Ohio, who didn't respond).

Michael Compher

Chief, Air Monitoring and Analysis Section Region 5 Air and Radiation Division U.S. Environmental Protection Agency

Phone: 312-886-5745

----Original Message----

From: Weinstock, Lewis

Sent: Thursday, April 13, 2017 7:44 AM

To: Judge, Robert <Judge.Robert@epa.gov>; Khan, Mazeeda <Khan.Mazeeda@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Rinck, Todd <Rinck.Todd@epa.gov>; Compher, Michael <compher.michael@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Davis, Michael <Davis.Michael@epa.gov>; Fallon, Gail <fallon.gail@epa.gov>; Flagg, MichaelA <Flagg.MichaelA@epa.gov>; Hall, Chris <Hall.Christopher@epa.gov> Cc: Payton, Richard <Payton.Richard@epa.gov>; Brown, Ethan <Brown.Ethan@epa.gov>; Papp, Michael <Papp.Michael@epa.gov>; Wells, Benjamin <Wells.Benjamin@epa.gov>; Naess, Liz <Naess.Liz@epa.gov>; Rice, Joann <Rice.Joann@epa.gov>

 ${\tt Subject:} \ \ {\tt URGENT\ ACTION\ -\ Invalidation\ of\ Ozone\ data\ in\ AQS\ due\ to\ QC\ issues}$ 

Importance: High

Good morning:

As you all are aware by now, we have recently identified ambient ozone data in AQS that was reported during periods of time when 1-point QC checks were outside the critical criteria in the QA Handbook and contained in approved monitoring organization QAPP's. We are currently in the middle of the ozone designations process and it is important that we maintain the integrity of that process. It is critical

that we base our designations decisions on defensible data for areas both attaining and not attaining the standard. To this end, we believe that the data identified as outside these critical criteria be null coded in AQS so that the underlying design values supporting the designations process are based on valid data. We understand that there is limited time to complete this work due to the tight timelines for designations. Therefore, this process has been divided into two phases as explained below:

## Phase 1

These are high priority monitors whose 2014-2016 design value would change or become incomplete due to the data invalidations. Attached to this message is an Excel table that explicitly lists the monitors and periods of time for when ozone data should be null coded (coded as Phase 1). We ask that you communicate with the affected monitoring organizations to ensure that these data are invalidated in AQS no later than May 1, 2017 (we will be doing our design value pull from AQS on the morning of May 2). Luckily this first phase only affects about 80 monitors, as some states have already begun invalidating their data.

## Phase 2

The list of the remaining monitors that will have similar data invalidation actions are coded as Phase 2 in the Excel table. These monitors have a less immediate impact on designations so are being included in the Phase 2 action. We recognize that this phase affects a larger number of monitors, therefore we are providing more time to invalidate this data. Please work with your monitoring organizations to complete this exercise by August 1, 2017.

Additional details on the Excel table: The attachment contains three tabs: (1) Data Invalidations — which contains specific information for the data invalidation, (2) 2014-2016 Design Values — design values before and after ("a" added to column heading) data invalidations, and (3) Failed QC Checks — details on the actual QC checks. Please contact Liz Naess (Ben Wells is out of the office until 4/24/17) or Mike Papp with questions on the data retrieval (Liz/Ben) or associated QA issues (Mike).

For additional background information on this quality assurance issue, please refer to the attached memo entitled "Ozone 1-point QC Check Data Quality Evaluation and Next Steps".

We will be checking in periodically during our monthly conference calls to answer any questions and assess progress on this action. Thank you for your prompt attention to this matter.

Lewis Weinstock (Ambient Air Monitoring Group and Liz Naess (Air Quality Analysis Group)

Air Quality Assessment Division - Mail Code C304-06 | Office of Air Quality Planning & Standards | U.S. Environmental Protection Agency | Research Triangle Park, NC 27711 |